

Abstract of the Disclosure

A system (11) for providing purified water comprises a plurality of individual modules, each of which includes a separable head (13) and a canister (17), which modules are joined one to another via these heads to create a composite manifold (15).

5 The heads and canisters are respectively of substantially identical construction, and the hollow canisters include the following units: preheater, prefilter (25), pump (27), membrane purification (29), postfilter (31), and UV treatment. The overall system is monitored by a control unit (131) that is regularly interrogated by an off-site, headquarters computer, and both the control unit (131) and the headquarters computer

10 are proactive in detecting potential difficulties that may be able to be readily remedied by promptly dispatching a serviceperson with a replacement for the canister containing the operating unit that requires replacement. The system itself is designed for extended term operation using a spirally wound, RO membrane purification element (29) by automatically and repeatedly flushing the feed passageways in the RO element whenever

15 the storage tank (123) is full of purified water, using a purified water feed from an auxiliary purification unit (85) for such flushing.